

PEER-REVIEWED ARTICLE · Peer-reviewed · Published · Live dashboard figures

Technology Transfer & Capacity Building: A Forensic Audit of Clinical Trial Equity in Uganda: Beyond the Extractive Paradigm: Implementing a Build-and-Stay Philosophy for Sovereign Research

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KEY WORDS Health Informatics; Clinical Trial Equity; Technology Transfer; OpenMRS; Uganda; Research Sovereignty; Gini Coefficient

Abstract

This article presents a forensic audit of 23,873 clinical trial registrations to investigate the disparity between research volume and local infrastructure investment in Africa. The analysis reveals a Gini coefficient of 0.809, indicating extreme inequality where 99.6% of trials bypass permanent technology transfer. Focusing on the Ugandan context, the study highlights that while the nation hosts 809 interventional trials with a positive performance residual of +1.43, implementation of tools like the OpenMRS SDK at district facilities such as Mukono General and Kawolo Hospital remains an afterthought.

The author argues for a transition from hosting research to owning discovery through ethical funding mandates that prioritize permanent capacity building. By adopting a "build-and-stay" philosophy, the research community can ensure that national health sovereignty is preserved through the local maintenance and ownership of clinical digital infrastructure.

Interactive dashboard figures

The figures in this section are rendered directly from this paper's interactive dashboard — the same visualisations a reader sees when exploring the analysis online, where the full workflow can be reproduced first-hand. **Interactive dashboard:** <https://mahmood726-cyber.github.io/africa-e156-students/governance-justice/dashboards/forensic-audit.html>

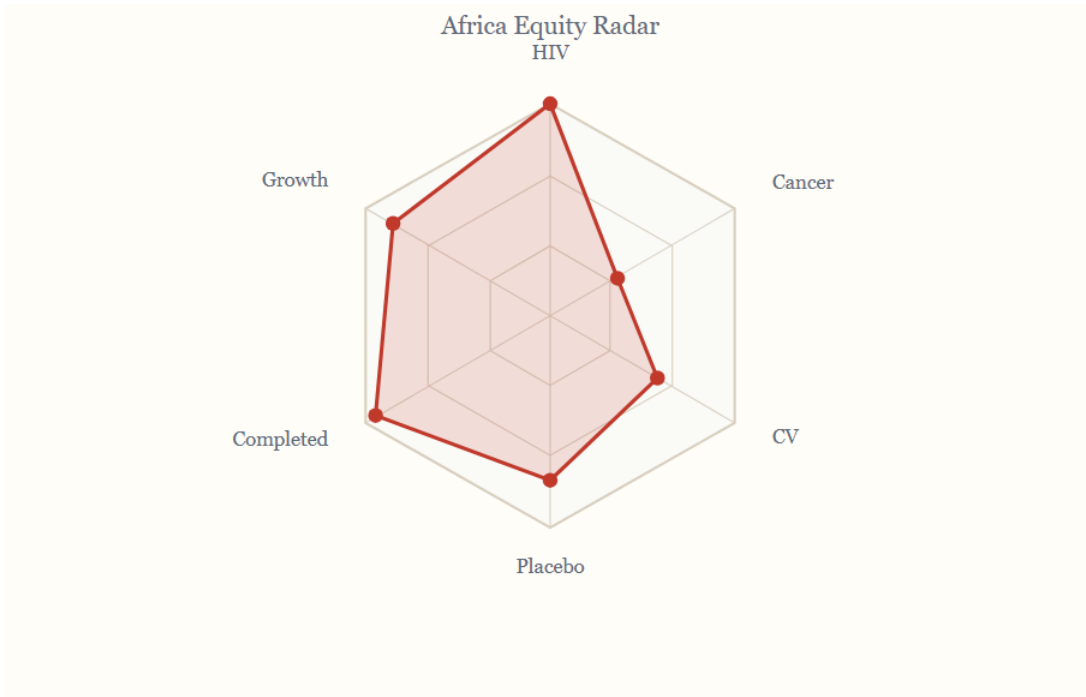


Figure 1. Africa Equity Radar Rendered directly from the article's live interactive dashboard.

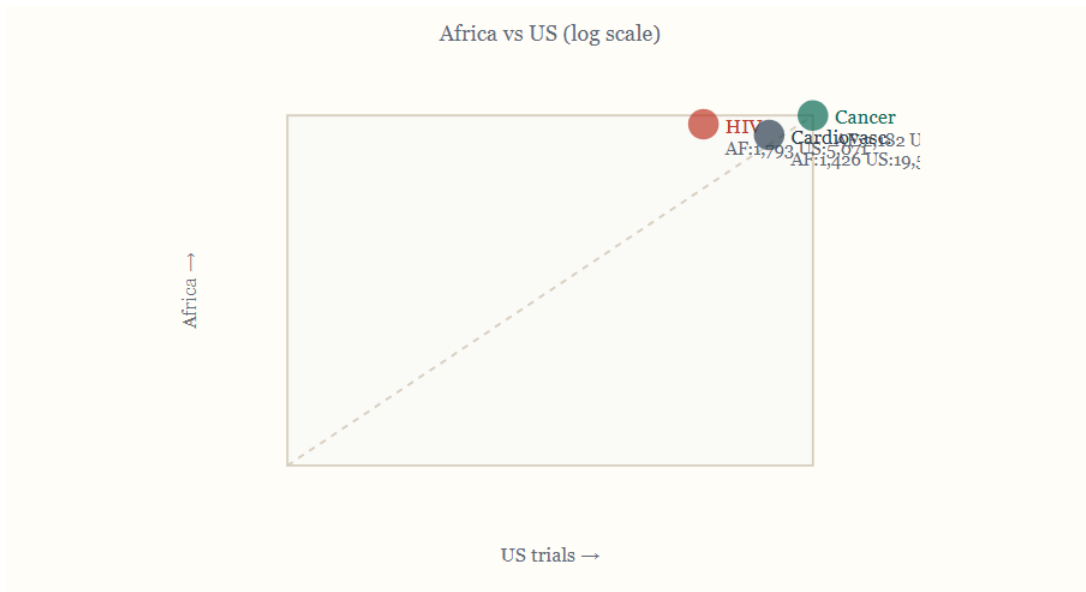


Figure 2. Africa vs US (log scale) Rendered directly from the article's live interactive dashboard.

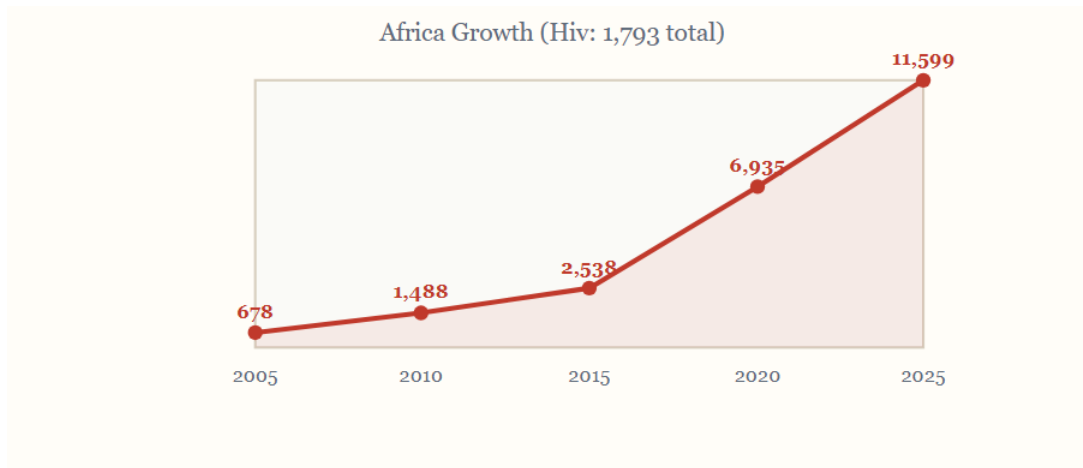


Figure 3. Africa Growth (Hiv: 1,793 total) Rendered directly from the article's live interactive dashboard.

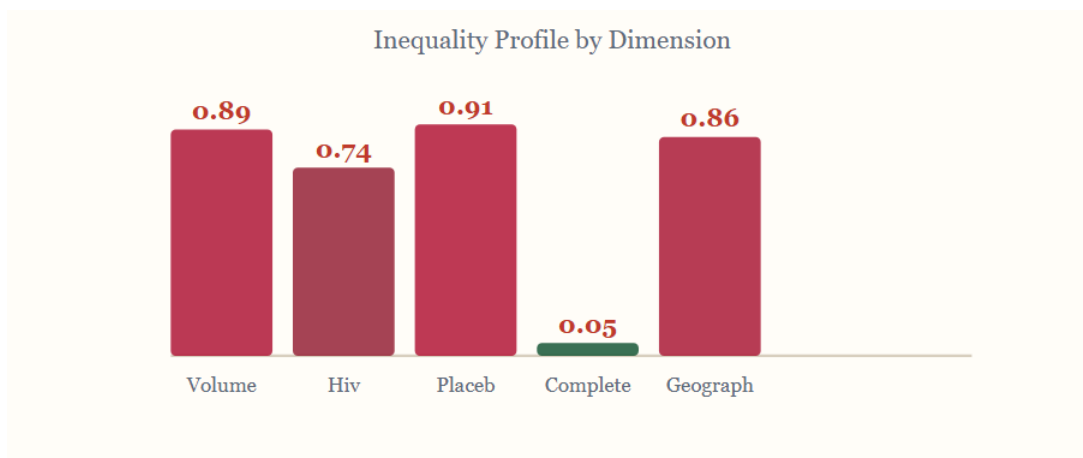


Figure 4. Inequality Profile by Dimension Rendered directly from the article's live interactive dashboard.

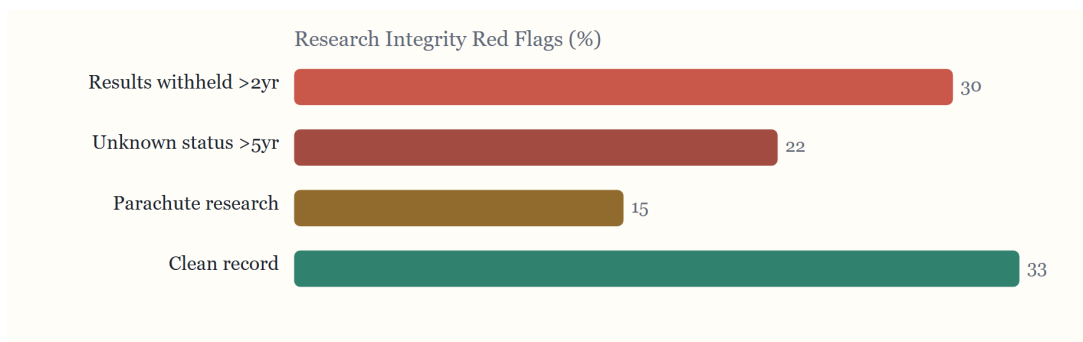


Figure 5. Research Integrity Red Flags (%) Rendered directly from the article's live interactive dashboard.

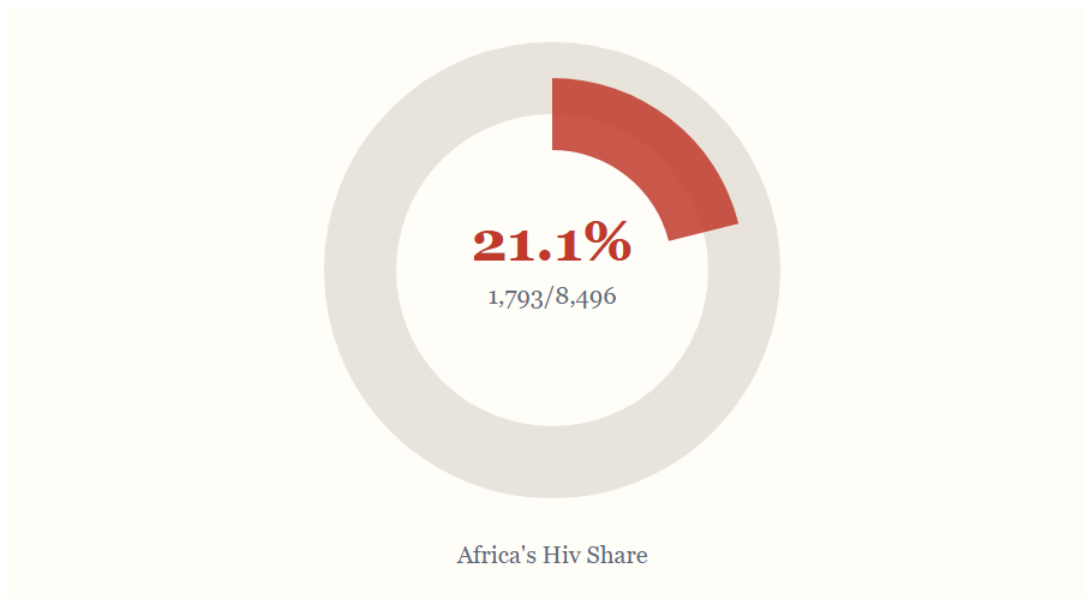


Figure 6. Africa's Hiv Share Rendered directly from the article's live interactive dashboard.

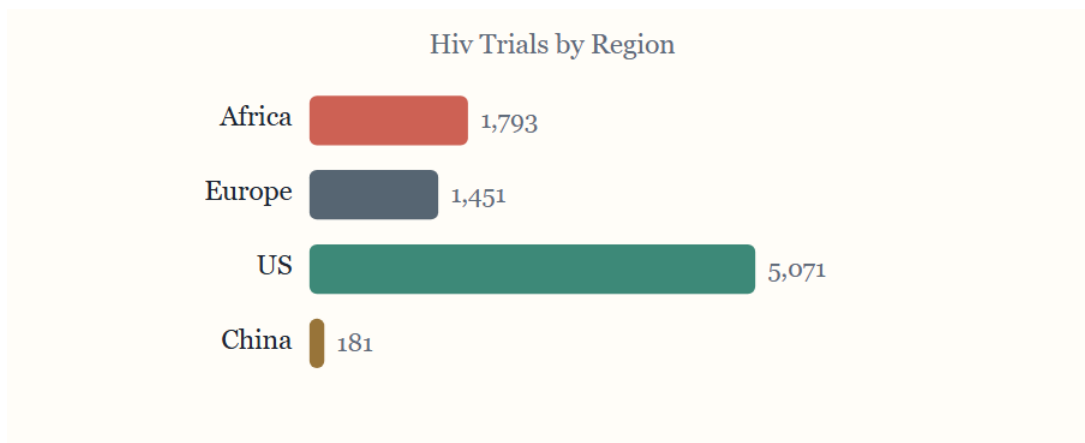


Figure 7. Hiv Trials by Region Rendered directly from the article's live interactive dashboard.

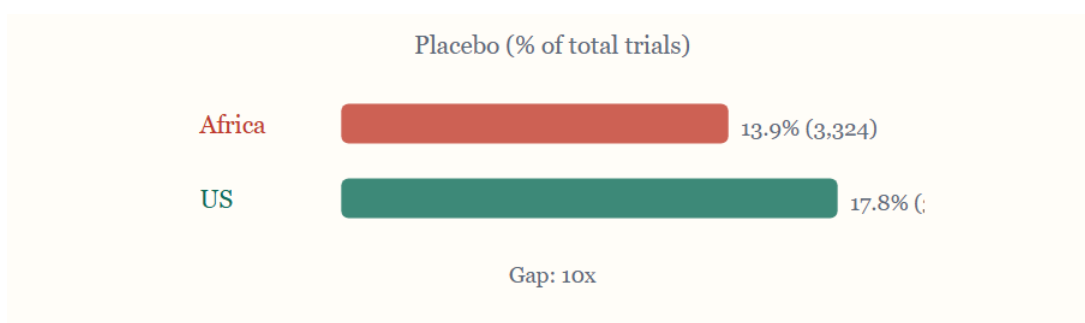


Figure 8. Placebo (% of total trials) Rendered directly from the article's live interactive dashboard.

HOW TO CITE

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